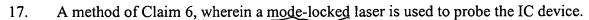
- 5 10 **10 10 75 154 10**
- 1. A method of testing the ESD performance of an IC device, comprising probing the device with a laser beam, and monitoring the amount of light reflected from the device.
- 2. A method of Claim 1, wherein a laser beam is used to probe the IC device.
- 3. A method of Claim 2, wherein the energy of the laser beam corresponds substantially to the bandgap of the substrate of the device.
- 4. A method of Claim 3, wherein the substrate is silicon and the energy of the laser beam is about 1.1 eV.
- 5. A method of Claim 3, wherein the diffusions of the IC device are probed with the laser beam.
- 6. A method of Claim 5, wherein the device is probed through the back of the device.
- 7. A method of Claim 6, wherein the diffusions of I/O cells are probed to determine how much light is absorbed and how much light is reflected by the diffusions.
- 8. A method of Claim 5, wherein several samples are taken of each probed location and the results averaged.
- 9. A method of Claim 1, wherein a mode-locked laser is used to probe the IC device.
- 10. A method of Claim 9, wherein a continuous wave laser is used in addition to the mode-locked laser, to provide an image of the IC device in order to facilitate the positioning of the beam of the mode-locked laser.
- 11. A method of Claim 10, wherein the mode-locked laser is positioned by a user.
- 12. A method of Claim 10, wherein the mode-locked laser is positioned automatically using image recognition.
- 13. A method of Claim 5, wherein power is supplied to the device during testing.
- 14. A method of Claim 13, wherein testing is performed on the device in a packaged form.
- 15. A method of Claim 13, wherein testing is performed on the device in a prepackaged form.
- 16. A method of Claim 15, wherein the device includes only some of its layers.

30



- A method of Claim 17, wherein a continuous wave laser is used in addition to the 18. mode-locked laser, to provide an image of the IC device in order to facilitate the positioning of the beam of the mode-locked laser.
- A method of Claim 18, wherein the mode-locked laser is positioned by a user. 19.
- A method of Claim 18, wherein the mode-locked laser is positioned automatically 20. using image recognition.